



Montana Fish, Wildlife & Parks

ENVIRONMENTAL ASSESSMENT DECISION NOTICE for the Canyon Ferry WMA Pond 3 Water Drawdown

**Montana Fish, Wildlife & Parks
Region 3, Bozeman
August 2017**

Preface

The enclosed Decision Notice has been prepared for the proposed water drawdown on Canyon Ferry Wildlife Management Area's Pond 3. Canyon Ferry WMA is administered by the Bureau of Reclamation (BOR) but is managed by Montana Fish, Wildlife & Parks (MFWP) through a management agreement with the Bureau of Reclamation. The proposed drawdown of Pond 3 would occur starting around early to mid-August 2017. The purpose of the drawdown is to reduce or eliminate carp in the pond and to aerate the wet pond soils. There is currently extremely high turbidity in Pond 3 caused by high numbers of carp. Carp inhibit the growth of submergent vegetation as a result of their feeding actions which stir sediments up resulting in muddy or murky water with little light penetration for the growth of submergent aquatic vegetation. Turbidity and presence of large bodied fish are also negatively associated with wetland invertebrate density and diversity. Carp typically overwinter in the pond below the ice. Therefore, one of the goals of the drawdown would be to completely dry up the pond or to lower water levels sufficiently enough to kill carp overwinter due to the lack of oxygen.

If successful, the drawdown would substantially improve water clarity and promote an increase in aquatic invertebrates and submergent vegetation which would improve waterfowl habitat in the pond and hence on the CFWMA. The duration of the drawdown would last until the pond started to refill from seepage from Canyon Ferry Reservoir. This would likely occur in late May to early June 2018. The desire is to extend the drawdown period through the spring growing season at a minimum to allow for adequate soil aeration and vegetation germination. Drawdowns of shorter duration can at times fail to yield the desired vegetative response.

Water levels in Pond 3 have traditionally been managed at relatively stable levels. Stable conditions lead to anaerobic soil conditions, and the lack of soil oxygen inhibits root growth of many wetland plants. Stable water conditions also lead to reduced wetland invertebrate numbers and diversity. Drawdowns are an effective management tool to simulate a wet-dry hydrological regime. A dry cycle aerates the soil, allowing oxygen to

be absorbed directly by plant roots, which stimulates growth. Drawdowns to improve wetland plant communities also can increase invertebrate productivity.

MFWP recognizes that it may not be possible to get the pond completely dry, or to keep it dry, due to factors outside of the control of MFWP, such as inflow from creeks, non-Department controlled irrigation ditches, springs in the pond, seepage through the dike from Canyon Ferry Reservoir, or overland flow (flooding) that may occur during the winter as a result of ice jams on the Missouri River. MFWP can only regulate water coming into Pond 3 from the Missouri River via the east side canal. Regardless, there are still ecological benefits to a drawdown even if the pond is unable to be completely dried such as improved soil oxygen, improved vegetative response, and higher invertebrate densities in those areas that are devoid of water for an extended period.

The primary objective of the proposed action is to improve submergent vegetation production for the benefit of waterfowl, primarily ducks and Canada geese, that utilize the pond. However, a drawdown will also improve foraging opportunities for shorebirds in the short term by exposing mudflats thereby making invertebrates more accessible during the drawdown and by increasing invertebrate density and diversity after the drawdown which will benefit both waterfowl and shorebirds.

Public Process and Comments

MFWP is required by the Montana Environmental Policy Act (MEPA) to assess potential impacts of a proposed action to the human and physical environment. An Environmental Assessment (EA) in compliance with MEPA was completed for the proposed action by MFWP and released for public comment on July 7, 2017.

The following three alternatives were considered in this Environmental Assessment:

Alternative A: No Action. Under this action the Pond 3 water drawdown would not occur.

Alternative B: Preferred Alternative: MFWP would drawdown Pond 3 for an extended time period (until late spring 2018) on the CFWMA to affect a complete carp kill in the pond and to allow for adequate soil aeration and vegetation germination in the pond, all to promote an increase in invertebrates and submergent vegetation to improve waterfowl and shorebird habitat in the pond and hence on the CFWMA.

Alternative C: Shorter Duration Drawdown: Alternative C was similar to Alternative B except that the duration of the drawdown would have been for a shorter time period (refill would likely start in early to mid-March) in an effort to try and accommodate waterfowl and colonial nesting waterbirds that nest annually on the islands in Pond 3.

Public comments were taken for 30 days (through August 7, 2017). Legal notices were printed in the Bozeman Chronicle, Helena Independent Record, and the Broadwater County Reporter. The Environmental Assessment was also posted on the FWP webpage: <http://fwp.mt.gov/publicnotices/>.

Three individuals submitted comments during the official comment period. All the individuals were in support of the Preferred Alternative (Alternative B). No additional actions were recommended by those individuals who provided comments.

Decision

It is my decision, based on the Environmental Assessment and public comment to approve the Preferred Alternative (Alternative B) of doing a water drawdown in Canyon Ferry WMA's Pond 3 for an extended time period. If successful, the proposed action will affect a complete carp kill in the pond and aerate the soils in the pond which is expected to promote an increase in invertebrates and submergent vegetation. Correspondingly, this will improve waterfowl and shorebird habitat in the pond and hence on the CFWMA. The proposed action will work toward MFWP meeting its objectives of improving habitat conditions on the Canyon Ferry WMA for waterfowl and other wildlife. The analysis did not reveal any significant impacts to the human or physical environment as a result of the project. I therefore conclude that the Environmental Assessment is the appropriate level of analysis, and that an Environmental Impact Statement is not required.



David Landstrom
Acting Region 3 Supervisor
Montana Fish, Wildlife & Parks

8/10/2017
Date